

AD-A174 581

SINGAPORE AS AN ALTERNATIVE TO SUBIC BAY NAVAL STATION 1/1

(U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH

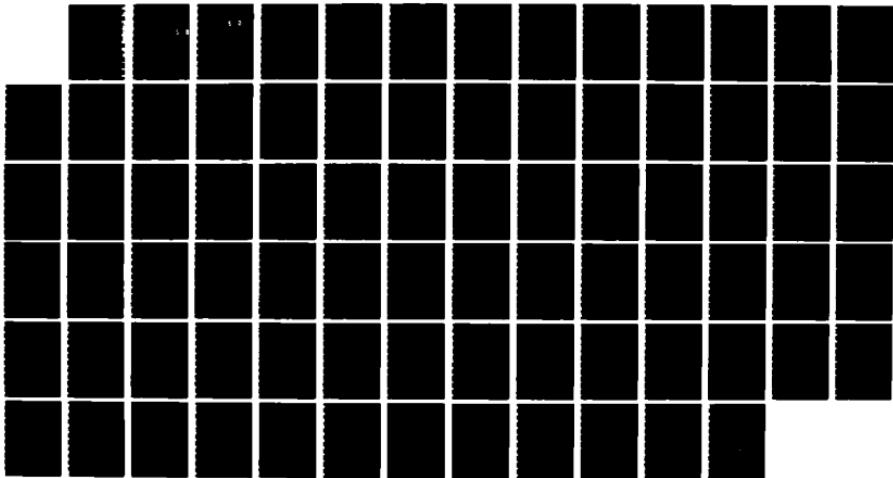
SCHOOL OF SYSTEMS AND LOGISTICS L L PETERSON SEP 86

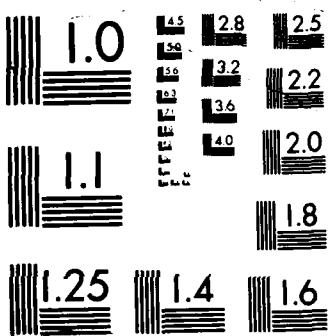
UNCLASSIFIED

AFIT/GLM/LSH/86S-57

F/G 5/4

ML





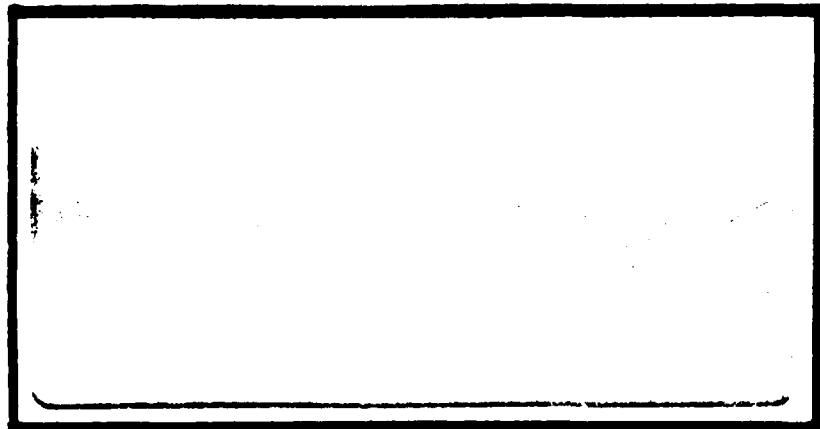
REPRODUCTION RESOLUTION TEST CHART

(2)

AD-A174 501



DTIC  
ELECTED  
DEC 02 1986  
S D



DISTRIBUTION STATEMENT A

Approved for public release  
Distribution Unlimited

DEPARTMENT OF THE AIR FORCE

AIR UNIVERSITY

**AIR FORCE INSTITUTE OF TECHNOLOGY**

DTIC FILE COPY

Wright-Patterson Air Force Base, Ohio

86 11 25 011

(2)

AFIT/GLM/LSH/86

DTIC  
ELECTED  
DEC 02 1986  
S D  
D

SINGAPORE AS AN ALTERNATIVE TO  
SUBIC BAY NAVAL STATION

THESIS

Larry L. Peterson  
Lieutenant, USNR

AFIT/GLM/LSH/86S-57

Approved for public release; distribution unlimited

The contents of the document are technically accurate, and no sensitive items, detrimental ideas, or deleterious information is contained therein. Furthermore, the views expressed in the document are those of the author and do not necessarily reflect the views of the School of Systems and Logistics, the Air University, the United States Air Force, or the Department of Defense.

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



AFIT/GLM/LSH/86S-57

SINGAPORE AS AN ALTERNATIVE TO  
SUBIC BAY NAVAL STATION

THESIS

Presented to the Faculty of the School of Systems and Logistics  
of the Air Force Institute of Technology  
Air University  
In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Logistics Management

Larry L. Peterson, B.S.

Lieutenant, USNR

September 1986

Approved for public release; distribution unlimited

### Preface

The purpose of this study was to investigate the feasibility of The Republic of Singapore for the site of an American naval base as an alternative to the present naval base at Subic Bay, Philippines. The possibility of the American naval base at Subic Bay being closed by the Philippine government in 1991 makes this study timely.

Singapore was studied in light of the United States' strategic goals in Southeast Asia, the political realities of present-day Southeast Asia, the capabilities of Singapore, and the needs of the American fleet in the Pacific.

In researching and writing this thesis I have had a great deal of help from others. I am deeply indebted to my faculty advisor, Dr. Weaver, for his helpful comments, patience, and positive attitude. I also wish to thank the staff of the AFIT library. Finally, I wish to thank my wife Lucia and my daughters, Jackquiline and Regina, for their understanding and cooperation for the time spent away from them while working on this project.

Larry L. Peterson

## Table of Contents

	Page
Preface . . . . .	ii
List of Figures . . . . .	v
List of Tables . . . . .	vi
Abstract . . . . .	vii
I. Introduction . . . . .	1
General Issue . . . . .	1
Specific Problem . . . . .	1
Background . . . . .	2
Research Objectives . . . . .	3
Research Questions . . . . .	5
Literature Review . . . . .	5
Topic Statement . . . . .	5
Justification . . . . .	5
Scope . . . . .	6
Discussion . . . . .	6
Political Situation in Southeast Asia . . . . .	6
Southeast Asia Defined . . . . .	6
Regional Cooperation . . . . .	8
Economic Cooperation . . . . .	10
Malacca Strait . . . . .	13
Other Foreign Policy Issues . . . . .	14
United States Strategic Goals in Southeast Asia . . . . .	15
Methodology . . . . .	17
II. Background . . . . .	18
General Historical Information . . . . .	18
Prior to British Arrival . . . . .	18
British Arrival . . . . .	18
1900's-1940's . . . . .	21
World War II . . . . .	22
The 1950's . . . . .	22
The 1960's . . . . .	24
Independence . . . . .	26
Social Environment . . . . .	26
Climate . . . . .	26
Geography . . . . .	27
Population . . . . .	27
Economic Environment . . . . .	32
Salient Features . . . . .	32
Industry . . . . .	32
Foreign Trade . . . . .	34

	Page
Transportation . . . . .	35
Standard of Living . . . . .	35
Reasons for Growth . . . . .	38
Government and Politics Characteristics . . . . .	39
Form . . . . .	39
Legal System . . . . .	40
Prime Minister Lee . . . . .	40
International Memberships . . . . .	40
National Security and the Military . . . . .	41
Primary Security . . . . .	41
Armed Forces . . . . .	41
United States Assistance . . . . .	42
Treaties . . . . .	42
United States Aid . . . . .	42
Summary . . . . .	43
 III. Findings . . . . .	44
Political Conditions for Move to Singapore . . . . .	44
Foreign Policy . . . . .	44
Economy . . . . .	45
People's Action Party . . . . .	47
Advantages of a Naval Base in Singapore . . . . .	47
Strategic Location . . . . .	48
Educated Labor Force . . . . .	48
Communication Center . . . . .	49
Infrastructure . . . . .	50
The Government . . . . .	51
Singapore's Ship Repair Capacity . . . . .	52
Disadvantages of a Naval Base in Singapore . . . . .	52
Security Threat from Land Attack . . . . .	52
Space . . . . .	55
 IV. Conclusion . . . . .	57
Why Singapore . . . . .	57
Strategic Role of Singapore . . . . .	58
Recommendations . . . . .	60
 Bibliography . . . . .	63
VITA . . . . .	67

### List of Figures

List of Tables

Table		Page
I.	Distance from Clark Air Base to Other Metropolitan Areas . . . . .	4
II.	Population and Per Capita Income for ASEAN Nations . . . . .	11
III.	ASEAN Exports and Imports with the US and Japan . . . . .	12
IV.	Intra-ASEAN Trade 1979 . . . . .	12
V.	Public Housing for Selected Years, 1960 - 1980 . . . . .	31
VI.	Singapore's Gross Domestic Product by Industry . . . . .	33
VII.	Actual GDP, GNP, and Population in Singapore, 1959-1970 . . . . .	36

Abstract

This investigation examined the feasibility of the Republic of Singapore as an alternative location for the current United States naval installation in Subic Bay, Philippines. Singapore was examined with respect to United States strategy goals in Southeast Asia, the political situation in the region, and the capabilities of Singapore as a United States naval base. The results present the political conditions necessary for a United States base to be accepted in Singapore, the advantages of relocating to Singapore, and the disadvantages of locating in Singapore. The recommendation of this research is that the number of 7th Fleet ships using Singapore as a port for the performance of minor shipboard repairs and ship refueling and as a liberty port should be increased. It is not considered feasible for Singapore to completely replace Subic Bay as a United States naval base.

## I. Introduction

### General Issue

The United States has a status of forces agreement with the Republic of the Philippines until 1991. Clark Air Base and Subic Bay Naval Station are the two American military bases included in that agreement. But because of increasing political unrest in the Philippines by organizations against a continued American military presence, the long-range status of the bases is uncertain beyond 1991. As of July, 1986, a committee working on a new Filipino constitution has approved a resolution prohibiting foreign bases in the Philippines after the current agreement on the United States bases expires in 1991 (15:2). Alternatives to the Philippine bases would then be necessary for the continuation of the current American military presence in the Western Pacific and Indian Ocean. One specific alternative is the relocation of American naval forces to the Republic of Singapore.

### Specific Problem

One problem facing American planners is how feasible is Singapore for a large American naval base. Other locations in the Pacific are possible, but their feasibilities are not covered in this research.

### Background

The United States has had an active relationship with the Philippines since 1898 when Spain ceded the Philippines to the United States under the conditions of the Treaty of Paris, which ended the Spanish-American War. The United States ruled the country until independence was granted on 4 July 1946. After independence the United States and the Philippines negotiated a military bases agreement. The original Military Bases Agreement was signed on 14 March 1947 and has remained in effect with various amendments since then. The current agreement is in effect until 1991, when at that point, with a one-year notification, either side can terminate the agreement or ask for renegotiation of the agreement (13:34).

Under terms of the agreement the United States has built the Philippine bases into major American military installations. The Subic Bay Naval Station consists of:

1. 62,000 acres
2. 6,000 feet of docking space with 3 wharves
3. 3 floating dry docks
4. a deep water harbor
5. a supply depot with 175,000 square feet
6. a fuel depot with a 110 million gallon capacity
7. a 200 bed hospital
8. a 9,000 feet x 200 feet runway
9. 150-200 aircraft

10. 15,000 landings/takeoffs per month
11. a depot level air repair facility
12. 46,000 tons of ammunition storage space
13. Cubic Point carrier pier (only overseas pier of its type) (8).

One reason for this large buildup of Subic Bay is its excellent strategic location. Table I lists the distances to key points in the Pacific from the American air base in the Philippines (18). Thus, one major advantage of an American military presence in the Philippines is its central location in the Pacific, which assists the United States in meeting its strategic military goals.

Examination of alternative sites for the current American bases in the Philippines must take into account the two important factors of size and location. Singapore has been used in the past by the British and Japanese as a major naval installation. Thus, it qualifies for replacing at least a majority of the Subic Bay capacity. It is also in an important strategic location because of its closeness to Malacca Strait.

#### Research Objectives

The research objective is to investigate the feasibility of a large American naval presence in Singapore. The results of this research will be an analysis of what political conditions will be necessary for an American naval presence in Singapore, the advantages of Singapore as an

TABLE I

Distance from Clark Air Base to Other Metropolitan  
Areas Measured in Nautical Miles (NM) (18)

Direction/Destination	Nautical Miles (NM)
<b>NORTH:</b>	
Taipei, Taiwan	480
Hong Kong	560
Kadena AB, Japan	794
Osan AB, Republic of Korea	1,270
Beijing, China	1,500
Tokyo, Japan	1,590
Vladivostok, Soviet Union	1,778
Misawa AB, Japan	2,000
<b>EAST:</b>	
Anderson AFB, Guam	1,415
Hickam ABF, Hawaii	4,800
<b>SOUTH:</b>	
Jakarta, Indonesia	1,500
Darwin, Australia	1,800
<b>WEST:</b>	
Cam Ranh Bay, Vietnam	666
Bangkok, Thailand	1,300
Singapore	1,315
Diego Garcia	3,260

American naval base, and the disadvantages of Singapore as an American naval base.

### Research Questions

1. Under what conditions would the relocation of American naval forces to Singapore be politically possible?
2. What advantages does Singapore have as a relocation site?
3. What disadvantages does Singapore have as a relocation site?

### Literature Review

Topic Statement. This section examines published literature and government publications that deal with the political situation in Southeast Asia and American strategic goals in the region. This will set the general conditions affecting Singapore's feasibility as an American naval base. Specific aspects of Singapore will be covered later.

Justification. The problem of what the United States actions should be if the American bases in the Philippines are closed has been much discussed. Most of the discussion has focussed on why the United States should stay in the Philippines or on the development of Guam as an alternative to the Philippines. Singapore, when mentioned, is usually casually dismissed as being politically unrealistic. An examination of the current literature on Southeast Asia and America's strategic goals in the region provides a better understanding of the possibilities and limitations of a move of American naval forces to Singapore.

Scope. Much information has been published on Southeast Asia and United States Southeastern Asia strategy by other governmental research institutions. Many journals and general works also deal with those two areas. This research, though, has been limited to materials available through the Air Force Institute of Technology (AFIT) libraries and the United States Library of Congress. Classified American documents have not been examined.

Discussion. Two areas concerning Singapore will be discussed. The first area, the political situation of Southeast Asia, establishes the general context of how Singapore is affected by regional politics. The second area is America's strategic goals in Southeast Asia.

#### Political Situation in Southeast Asia

Southeast Asia Defined. Southeast Asia encompasses a broad geographical area from China in the north, Australia in the south, India in the west, to the Western Pacific in the east (see Figure 1). The countries included in this region by most commentators are Singapore, Malaysia, Indonesia, Thailand, the Philippines, Vietnam, Cambodia, Laos, and Brunei. The term "Southeast Asia" gained currency during the Second World War as a collective designation for the Japanese-occupied countries south of China (38:3). The area is marked by a wide diversity of languages, economics, natural resources, and political

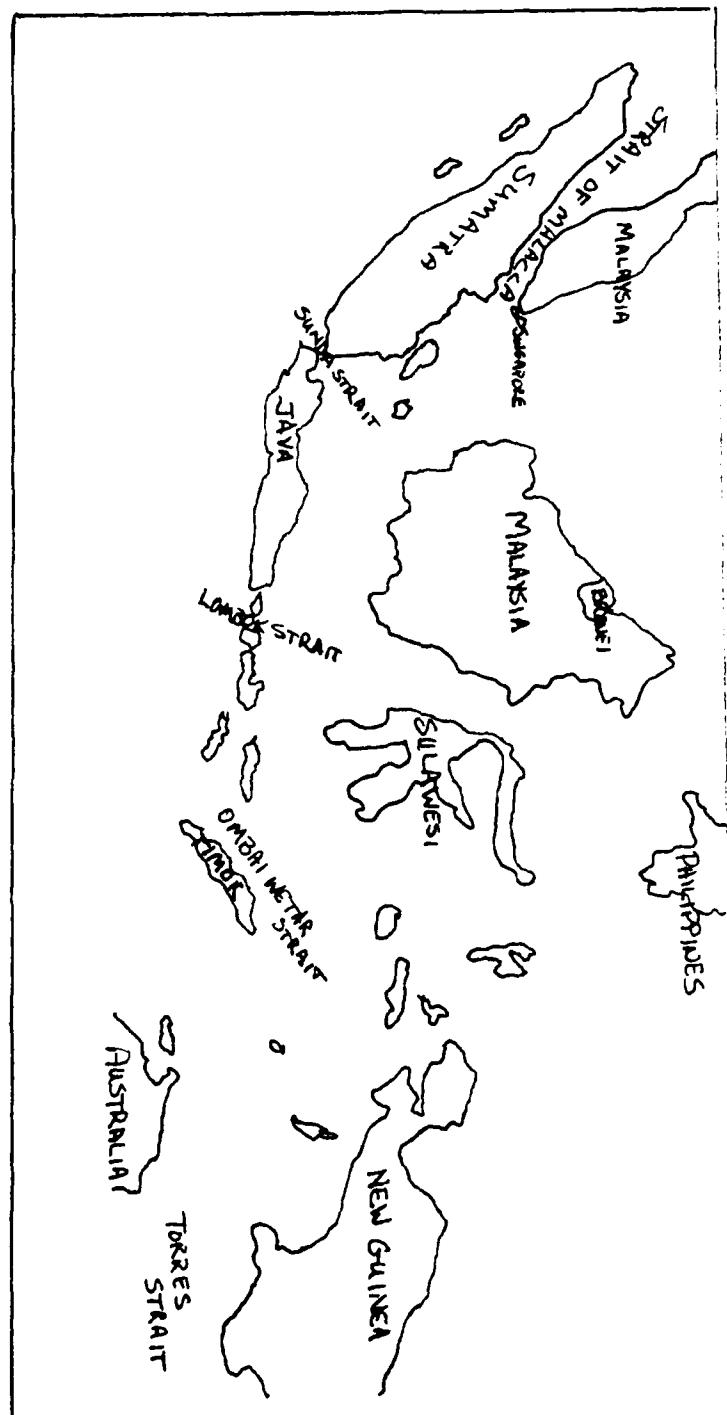


Fig. 1. Map of Southeast Asia

traditions. In 1967 an Association of Southeast Asian Nations (ASEAN) was formed to enhance regional cooperation for cultural and economic development. ASEAN consists of Singapore, Indonesia, Malaysia, Thailand, the Philippines, and Brunei. The countries outside of ASEAN are not considered in this treatment of Southeast Asia because as communist governments they have had little direct involvement with Singapore. Brunei on the island of Borneo is an oil rich sultanate which became fully independent from Britain on 1 January, 1984 and a member of ASEAN on 10 January, 1984 (40:67). It does not yet figure prominently in the politics of ASEAN and therefore is not covered extensively.

Regional Cooperation. Various other attempts at regional cooperation through formal organizations have failed. In 1961 Malaysia, the Philippines, and Thailand formed the Association of Southeast Asia (ASA) (31:9). It split up primarily because of the territorial dispute between Malaysia and the Philippines over the Malaysian territory of Sabah. Other problems during the mid-60's hurt the relations between the countries of the region according to Guy J. Pauker, in "ASEAN Trends and Problems in the 1980's":

Historical grudges, divergent foreign policies, and active conflicts created barriers against regional cooperation. Indonesia harassed Malaysia and Singapore for several years with a policy of confrontation backed by modern weapons acquired from the Soviet Union. The Philippines pressed a

legally spurious claim against Malaysia for sovereign control of the territory of Sabah. Singapore and Malaysia had split after a few years of uneasy partnership. Established frontiers between Thailand and Malaysia could be easily challenged on historical, ethnic, and religious grounds. (26:2)

The primary reason for the diversity of the ASEAN nations is the diversity of their respective colonial pasts. According to Lea E. Williams in Southeast Asia: A History:

There has been relatively little exchange among Southeastern Asian countries in modern times. The great decisions of state in the colonial era were made in Western capitals. Economically, the region was fragmented into units, each individually tied to outside industrialized trading partners. In human terms, the peoples were sharply separated from one another by colonial frontiers. (38:3)

Singapore, Malaysia, and Brunei were colonized by the British, whereas Indonesia was colonized by the Dutch. The Philippines was colonized first by the Spanish and then by the United States in the 20th century. Thailand was the one country in the region that remained politically independent but was still heavily influenced by the French.

In addition to their different colonial pasts, cooperation between ASEAN nations is hindered by religious and cultural differences. Indonesia and Malaysia are predominantly Muslim and native to the region while Singapore contains predominantly Overseas Chinese with Chinese religions brought with them from mainland China. This conflict

between the predominantly Muslim Malays and Chinese was to a large degree responsible for the separation of Malaysia and Singapore in the 1960's. Riots in Malaysia in the 1960's were primarily motivated by Malay resentment against the Overseas Chinese living in Malaysia. This resentment spilled over into Singapore (10:54). The Philippines presents a special case in that it is the only predominantly Christian nation in Asia. Differences between the Catholic majority of the Philippines and the Muslim minority in the Southern Philippines has been a persistent problem in modern Philippine history.

Economic Cooperation. The countries of ASEAN have tried to develop more cooperation with varying degrees of success. In the field of economics the diversity among them has hampered a true "common market" approach. The figures in Table II exhibit the vast differences in development between the countries.

Singapore is the only truly urbanized and industrial country in the region. The other countries have natural resources based economies. Crude petroleum and petroleum products dominate Indonesia's exports; tin, palm oil, rubber and timber the exports of Malaysia; timber, copra and sugar the exports of the Philippines; and rice and corn the exports of Thailand (27:3).

TABLE II  
Population and Per Capita Income for  
ASEAN Nations (27)

Country	Population	Per Capita Income
Indonesia	148 mil	\$ 240
Philippines	48 mil	\$ 618
Thailand	46 mil	\$ 599
Malaysia	13 mil	\$1,523
Singapore	2.3 mil	\$4,150

Trading patterns also emphasize the economic individualism of the area. In 1979 ASEAN exports were 50 billion dollars with imports of 46.5 billion dollars (27:2). For each country Japan and the United States were important trading partners as Table III shows.

Intra-ASEAN trade does not play a dominant role in the commerce of any of the five countries. Much of the intra-ASEAN trade is with Singapore because of its industry. The other countries supply the raw materials necessary for Singapore's industry. Most of Indonesia's oil, for example, is processed and refined by Singapore and then exported to all of its ASEAN neighbors (27:4). The figures in Table IV indicate the magnitude of intra-ASEAN trade.

TABLE III  
ASEAN Exports and Imports with the  
United States and Japan (27)

Country	Exports		Imports	
	U.S.	Japan	U.S.	Japan
Indonesia	20.35%	46.14%	14.57%	29.00%
Philippines	30.20%	26.39%	22.98%	22.53%
Thailand	10.78%	20.70%	16.68%	26.25%
Malaysia	16.90%	23.90%	15.30%	23.40%
Singapore	13.71%	10.34%	14.24%	38.11%

TABLE IV  
Intra-ASEAN Trade 1979 (27)

Country	Imports	Exports
Indonesia	14.24%	11.59%
Philippines	4.00%	3.57%
Thailand	17.95%	7.05%
Malaysia	19.17%	14.82%
Singapore	19.50%	18.64%

Malacca Strait. The status of the Malacca Strait is also a major source of differences between the countries of ASEAN. The Malacca Strait, which is bordered by Indonesia, Malaysia, and Singapore, is one of five major passages which can be used by ships moving between the Indian Ocean and the Western Pacific. It is the only one that is considered to be an international strait by its major users. The four alternative routes to the Malacca Strait are in the Indonesia Archipelago. They are the Sunda, Lombok, Ombai-Weter, and Torres Straits. The four straits through Indonesia are not considered international passageways. If the five straits were closed to international traffic it would add approximately 3,000 nautical miles to the Indian Ocean-Western Pacific route. The international status of the Malacca Strait is therefore vital to Singapore's economy. Indonesia and Malaysia, as nations less dependent on international trade for their economic well-being, are more interested in asserting national sovereignty over the Malacca Strait by invoking their 12-mile territorial limit (4:1). This would greatly hamper international trade from the Indian Ocean to mainland Asia.

Singapore is the smallest of the three coastal states, but its port facilities handle a very high proportion of the traffic through the Malacca Strait, and, until the post-1973 increase in Indonesia's oil revenues, its exports were somewhat larger than those of that country, and of Malaysia. Because its economy is heavily dependent on foreign trade, the Singapore administration is very reluctant to take any steps that would

discourage international use of the Malacca Strait. For vital economic and security reasons, however, Singapore is obliged to maintain a high level of cooperation with its immediate neighbors, Malaysia and Indonesia. (4:15)

Other Foreign Policy Issues. Besides the Malacca Strait, ASEAN nations have not cooperated on other foreign policy issues. Each country has largely pursued its own foreign policy independent of the other ASEAN nations. But in 1975, with the formation of a communist united Vietnam, and the consequent pull-out of American forces in the area, this lack of cooperation in ASEAN nations' foreign policy has started to change. Only by pooling their individual military assets can the ASEAN nations hope to meet Vietnam on anything like even military terms (26:6).

Also the foreign policy goal of establishing a zone of peace in the region without outside intervention is slowly changing. All ASEAN nations are now increasing their respective defense expenditures and capability.

Until recently the five ASEAN governments had been restrained in allocating resources to defense. Viewing inadequate economic development as the major threat to their security, because it could promote subversion, the ASEAN governments had been avoiding the diversion of resources to military expenditures. In the absence of perceived threats of imminent external aggression, military and civilian defense officials were endorsing these policies of economic planners. Vietnam's actions since 1978 have dramatically altered that outlook. Modernization and expansion of the armed forces is now considered necessary. (25:9)

In addition to Vietnam, an increased Soviet presence in the region has made ASEAN nations more aware of possible external threats to the region. The Soviet Union has built a large naval base at Cam-Ranh Bay, Vietnam, which greatly increases their presence in Southeast Asia (5:B-8). The internal security of the ASEAN nations has also increased since the 1950's, thus making ASEAN nations more aware of external threats. During the 1950's internal communist insurrections were a major problem in all of the countries. Since then with the relatively stable internal situation the ASEAN nations have turned their attention to external threats. Prime Minister Lee of Singapore has been the most vocal in opposition to Vietnam aggression in Cambodia and one of the most supportive of increased Western presence in the area. ASEAN's victories in the United Nations over recognition of Vietnam supported Cambodia have signalled a new sense of foreign policy cooperation in the region (25:10).

In summary Singapore is a unique member of a diverse and volatile region. It is a city-state, with a relatively high standard of living, and with an ethnically different population from its neighbors. These facts have played a part in shaping Singaporean policies.

#### United States Strategic Goals in Southeast Asia

The United States' interest in Southeast Asia is based on the Forward Strategy Concept, which according to Dr.

1. Southeast Asia and the Western Pacific constitute an area of important US interests.
2. The area is insecure due to threats posed by communist activities or unstable local governments.
3. The United States can effectively influence and stabilize events in Southeast Asia by maintaining a forward-based, offshore military presence.
4. The geographic containment and political-military isolation of Asian communism and other destabilizing elements are facilitated by the presence of US military power in the area.
5. US military presence in allied Asian/Pacific countries signals an intention to play a continuing role, and develops mutual understanding with host governments of capabilities and intent.
6. A forward-defense strategy in the Asian/Pacific region requires that the United States operate out of facilities adjacent to the Asian mainland (principally Japan and the Philippines). This base structure provides a flexible, in place, quick-reaction capability to deploy forces in contingencies and allows a "force multiplier effect," because fewer ships and planes are needed to provide an equivalent forces presence than if forces were restricted to the continental United States or US Pacific territories. (16:1)

The Forward Strategy Concept in Southeast Asia is important because of oil. The Indian Ocean region has over one-half of the world's seaborne oil moving across it at any one time (16:6). Soviet naval build-up in the area requires a United States presence for protection of the vital trade route. The United States is less dependent on this route than the United States' important Pacific ally Japan. Japan imports about 85 percent of its oil requirements from the Persian Gulf (16:31). Thus, protecting our interests in Southeast Asia also aids our interests in the Northern

Pacific. The Malacca Strait is the shortest route between the Indian Ocean and the western Pacific. It is about 500 miles long and approximately 8 miles wide. "The Strait is extraordinarily crowded: approximately 40,000 vessels enter and leave Singapore each year; most of them transit the Strait." (4:4) Alternatives to the Malacca Strait and the straits through Indonesia would add 3,000 miles to a trip from Guam to Diego Garcia.

As mentioned before the United States carries on a large amount of trade with Southeast Asia. The continuation of this trade is also important to the best interests of the United States.

#### Methodology

The general method used in this research was to survey existing records. In subsequent chapters Singapore will be covered in more detail. The conditions necessary for a move of American naval forces to Singapore, the advantages and disadvantages of Singapore as a naval base, and concluding remarks will also be addressed.

## II. Background

### General Historical Information

Prior to British Arrival. There is little known about the history of the island of Singapore prior to the British arrival. It is believed that at some time between 1200 A.D. and 1300 A.D., colonists from the island of Sumatra founded a separate island kingdom on Temasek and called it Singa Pur (Sanskrit for city of the lion) (10:41). It is only fitting then that the country represented by the symbol of the lion (England) would later develop the island.

It is estimated that at some time between 1360 A.D. and 1365 A.D. invaders from Java completely destroyed Singapore. From its destruction until British arrival the island remained primarily a haven for pirates (10:41).

British Arrival. Singapore was brought under British rule by Sir Thomas Stamford Raffles. His motives for settling on the island were to acquire a British base at the southern end of the Malacca Strait to offset the temporary restoration of Dutch rule at Malacca, compensate for the disadvantages of remote location at the British port of Penang, and break the commercial grip on the Malaysian archipelago maintained by the Dutch. Singapore filled the bill superbly.

Besides Singapore's superb location it was sparsely inhabited and its legal sovereignty was under dispute in the local Malay court. Therefore, it was relatively easy for Raffles to gain control of the island and for all intents and purposes making it a British colony in 1819 (17:501).

Singapore rapidly developed into a busy port. It soon surpassed the existing ports of Malacca and Penang on the west coast of the Malay Peninsula. It was named the capital of the Straits Settlements in 1832. Singapore's meteoric rise to commercial dominance resulted directly from the institution of free trade at the port. For the first time, merchants in the region had access to an entrepot where goods could be exchanged without restraint (10:42).

Singapore's settlement also brought about rapid population growth. Labor was needed in order to turn Singapore into an entrepot. The Malays were unwilling to do the physical labor and were insufficient in numbers. But the Chinese and to a lesser extent the Indians were willing to do the work required. By the mid-1840's 61 percent of the population was Chinese (10:42). Most of the Chinese were laborers but a few of them became substantially wealthy. Singapore's situation was unique in that the Chinese for the most part assimilated easily into the Singapore culture and economy. In neighboring Malaysia the Chinese immigration presented problems because of Malay resentment at the growing Chinese presence. Part of the problem, in Malaysia, was also caused

by the Chinese themselves because of their continued attachment to mainland China. They considered their primary loyalty to be to China even into the 20th century. The Chinese of Singapore also retained their primary loyalty to mainland Chinese well into the 20th century (10:46). This fact must be remembered to understand the political events of Singapore later on.

Singapore was run by the British East India Company until 1858. This helps to explain the easy acceptance of the Chinese. The Company was more interested in profits than in maintaining the ethnic status quo. Profits were made by taxing gambling, luxury goods, and imports for local use. Tax collectors were allowed to keep any revenues above a certain amount (10:43).

Profits were continually threatened by unrest and lawlessness in the region. Specifically, Chinese secret societies had sprung up in response to the need for the Chinese to have some type of governmental order since they were not allowed to participate in the British or Malay ruling structures. Also, the Chinese, since their loyalty was with mainland China, did not recognize Malay authority (17:869). Thus, Singaporean society continually called for greater participation by the British government into Singapore's affairs. In 1858 Singapore came under the auspices of the India Office in London and in 1867 a British Crown Colony. Finally, in 1877 the post of Chinese protector was

created to help maintain British authority. The British for the first time began to deal directly with the Chinese community (10:44).

1900's-1940's. The period of the early 1900's in Singapore's history was marked by continued economic growth. The basis for continued British rule was that the Chinese still could not be trusted to fairly run the island because their loyalty was still with mainland China. After all, the British were making money and had a fierce pride in their Empire. Most Chinese were sympathetic to the uprisings taking place in China during this period.

But another factor affecting Singapore's history was that a group came into being called Straits Chinese whose outlook was towards Singapore instead of mainland China. The development of a Chinese community whose outlook was towards Singapore instead of China helped to pave the way for independence later. During World War II Straits Chinese finally outnumbered Chinese born in mainland China. But a wide gulf existed between the Straits Chinese and the recent Chinese immigrants. The consequence of this gulf was that it was difficult to create a mass-based political party. One other factor important to Singapore was that the ratio of males to females declined from the 15 to 1 of the 19th century to the more normal 1.6 to 1 (10:45).

World War II. Singapore was built into a major British naval base in 1938 and was labelled the "Gibraltar of the East." Events of 1942 revealed the shallowness of the boast. The Japanese conquered the Malay Peninsula and Singapore in a lightning campaign of two months with Singapore falling on 15 February 1942 (33:316). The end of the battleship era in naval warfare was demonstrated by the sinking of the British battleships Prince of Wales and Repulse only three days after Pearl Harbor, when they attempted to stop the Japanese landings on the Malay Peninsula.

But the real impact of the Japanese invasion was that it destroyed the foundation on which colonialism rested. The Japanese proved convincingly that white superiority was a myth. The success of the Japanese had consequences for the history of Southeast Asia that cannot be overestimated. The Japanese treated the ethnic Chinese of Malaya and Singapore with savage brutality because they saw the Chinese as bitter opponents who could not be trusted. Yet they treated the native Malays with some respect thereby somewhat justifying their claims of "Asia for Asians." But the Japanese had left a legacy of bitterness and mistrust towards themselves in Southeast Asia that exists to this day (17:819-820).

The 1950's. The 1950's were characterized by two trends, the move for independence and communist uprisings. In 1946, when the proposals for a Malayan Union were drawn up by the British, Singapore with its large Chinese

population was left out. The reason was that by including Singapore in the Federation of Malaysia the Chinese would have outnumbered the Malays in the nation. Therefore, Singapore continued to be a British colony despite the fact that Malaysia was granted its independence. Another reason for Singapore's exclusion was that while Malaysia depended on customs duties for three-fifths of her revenue, Singapore had grown up as a free port, and her success depended upon her free trade policy (10:48).

But the drive for Singapore's independence was complicated by the communist insurgency on the peninsula called the "Emergency." Britain was unwilling to grant independence without some assurance that Singapore would not aid the communists in Malaysia. The communist insurgency in Malaysia was for the most part composed of Chinese rather than Malays. Singapore with its large Chinese population had a large portion of its population sympathetic to the communist movement because of their ties to mainland China. Nevertheless, the drive towards independence continued. Based on the results of a commission led by Sir George Rendel in 1953, Singapore was given a constitution in 1955. But the government was a dyarchy with British ministers responsible for finance, external affairs, defense, and internal security (17:888).

Mr. David Marshall, the leader of the Labour Party, managed to become the Chief Minister. But due to his

inability to achieve Singaporean sovereignty over internal security, he resigned in 1956. His successor, Lim Yew Hock, reached agreement with the British in 1957 over the internal security question. Therefore, Singapore was granted another constitution conferring full self-government and citizenship to all Singaporeans born in Singapore (17:888).

The first general election took place in May, 1959. The People's Action Party (PAP) won 43 out of 51 seats, and its leader, Mr. Lee Kuan-Yew became prime minister. The party was definitely left-wing with a communist element. The PAP had been blamed for starting the uprisings during the years after World War II. The new president was a moderate, though, and he became rapidly embroiled in political battles with the communist element in the PAP (17:889).

The 1960's. The 1960's started out with Prime Minister Lee wanting Singapore to become a part of the Federation of Malaysia. This was also desired by the President of Malaysia, Tunku Abdul Rahman. But the communist element in the PAP resisted such a union because they were hoping to make Singapore a communist stronghold. Also, elements of the Federation of Malaysia opposed Singapore's entry into the union because Singapore's entry would give the Chinese a majority in the country. The PAP held a public referendum on Singapore's entry into the union with an overwhelming victory for Lee and a crushing defeat for the communists.

Thus, the marriage of convenience with the communists in the PAP came to an end over the merger issue (17:891).

But the communists did not give up without a fight. A general strike was called by the Communist-led Barisan Sosialis Party. The government cracked down on the communist unions by arresting its leaders and thereby assuring labor peace in Singapore. Strict labor union control has been maintained ever since. The tactic of leading opposition to PAP by operating outside parliament by the Barisan Sosialis Party led to its downfall. Effective opposition parties to PAP have not existed since (10:53).

While Singapore was dealing with internal problems, friction was also developing between Singapore and the rest of the Federation of Malaysia. There were two major problems. First the national Malaysian government was uneasy over the aspiration of the PAP to change from a strictly Singapore-based party to a Malaysian national party. PAP had entered nine candidates in the national elections of the Federal of Malaysia in April, 1964. The second problem was the race riots of 1964 in Singapore between the Chinese and Malays. The cause of the riots is unknown but the deaths of twenty-seven people and 1,700 arrests created antagonism between the Pap and the United Malays National Organization (UMNO). Indonesia at the time was also involved in creating unrest in Malaysia in a movement called the "Confrontation." Indonesia was supporting the Chinese communists in Malaysia

and a quasi-war existed between Indonesia and Malaysia. This heightened the differences between Singapore and Malaysia. The differences between PAP and UMNO began to take on racial overtones. Lee was therefore compelled to accept Singapore's departure from the Federation of Malaysia on August 9, 1965. That is that date on which the republic of Singapore became a fully independent state (10:54).

Independence. The forecast by most experts was that Singapore would not be a viable independent nation. Many people thought that Singapore was too reliant on Malaysia for raw materials and as a market for Singapore's finished goods to be independent. But thus far Singapore has proven the experts wrong. The key themes of Singapore's independence so far have been its strong economy, the strong and uninterrupted rule of PAP, and the achieving of a national identity despite its varied ethnic makeup. Further points about Singapore as an independent nation will be made in the other sections on Singapore's current structure as a nation.

#### Social Environment

Climate. Singapore has a tropical climate with high temperature and high humidity. Northeast monsoons are prevalent between November and March with southwest monsoons prevalent from May to September causing occasional heavy rains and flooding (10:13).

Geography. Singapore is a small nation (see Figure 2). The total land area is about 230 square miles with most of that on Singapore Island. Numerous other islands are a part of Singapore. Singapore is located off the tip of the Malay Peninsula at a narrow point of the Strait of Malacca. It is connected with the Malay Peninsula by a causeway connecting the Malaysian province of Johore with Singapore.

Population. Singapore has a population of approximately 2.3 million with a low annual growth rate of 1.3 percent. The growth rate has steadily declined from approximately 5 percent in the 1960's to its present rate. It is the goal of the government to achieve zero percent growth. The government has instituted several birth control programs in order to achieve its goal. Since Singapore is a city-state its population is largely urban with a density of 9,673 per square mile (10:27).

Singapore is marked by racial diversity. Chinese make up about 76 percent of the population with Malay at 15 percent, Indian 7 percent, and other various groups making up the balance. The Chinese have traditionally held most of the economic power in Singapore despite the presence of the other groups. Malaysians today still make up most of the lower income group. Singapore upon achieving independence made Malay the official language as one way of acquiring Malay support for an independent Singapore. In addition, Singapore has had affirmative action policies in place in

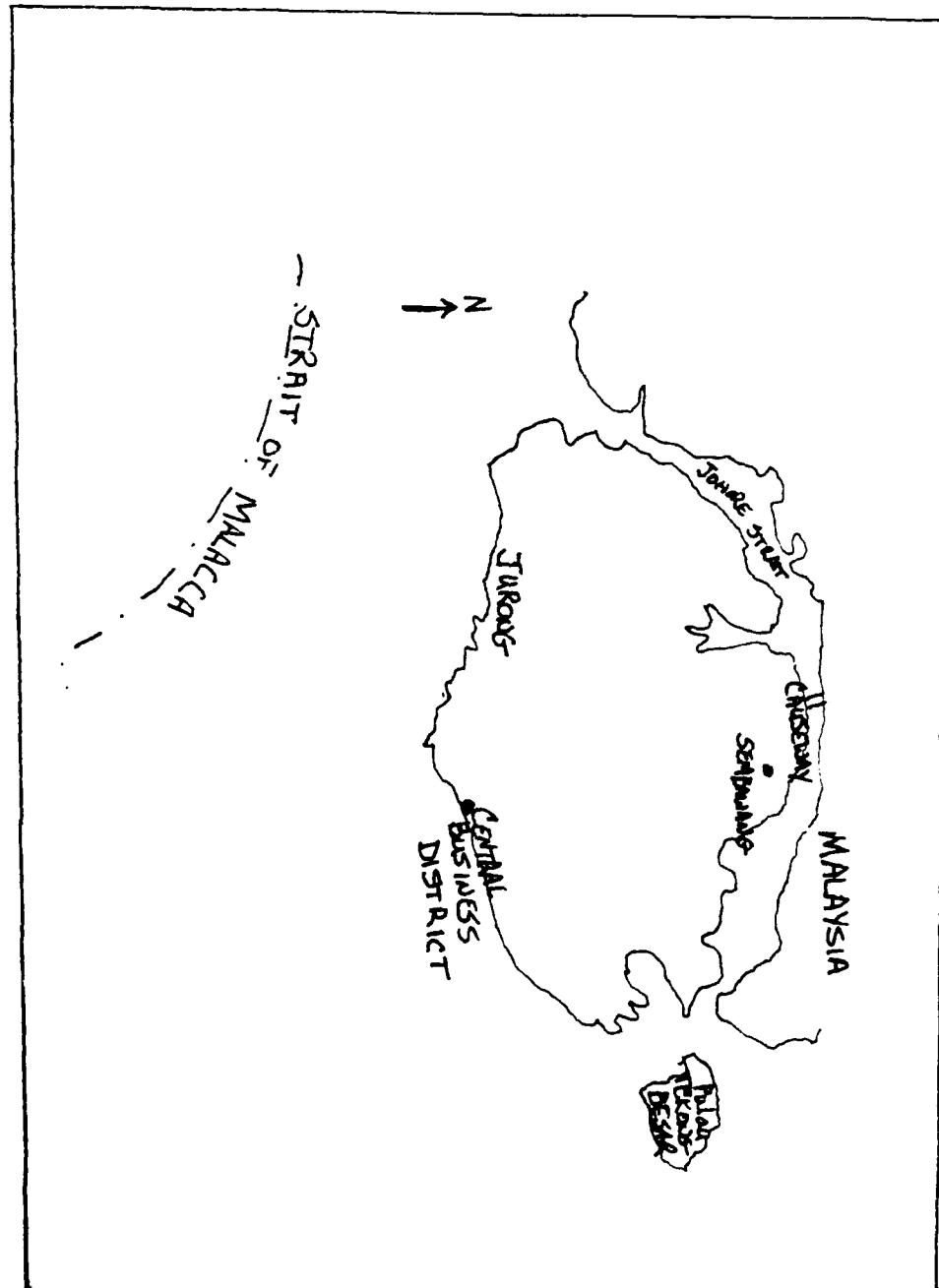


Fig. 2. Map of Singapore

order to integrate Malays into the upper reaches of Singaporean society. The policies have met with limited success. The racial antagonism between the Malays and Chinese has a large influence on Singapore's internal policies and on Singapore's relations with its neighbors. Recent elections have shown Malays to be more dissatisfied with their lot under PAP than the Chinese and therefore they have supported opposition parties to a greater extent than the Chinese (7:1).

But the Chinese are also made up of sub-groups depending on where they were born. As already mentioned in the history of Singapore, differences in outlook have existed between Straits Chinese and those born on the mainland. Other differences exist between those who speak different dialects of Chinese. Differences also exist between Chinese from different regions of mainland China caused by the different dominant occupations of the regions. The different values stem from the differences between rural cultures and urban cultures. Some of the differences in Chinese society sound to an American much like the differences between a person born in New York City and someone born in the rural South. The word Chinese as a general term to describe all people who are descendants from China covers a multitude of differences in the Chinese culture. There are also a great many differences between sub-groups in the Malay culture. Some Malays trace their cultural roots to

the island of Borneo while others have been more influenced by the traditions of the Malaysian Peninsula (9:95).

The primary religions of Singapore are Buddhist and Taoist for the Chinese, Muslim for the Malays and some Indians, and Hindu for the other Indians (10:8).

Education is noncompulsory but includes free universal primary school education. Four streams of education are based on language which are English, Chinese (Mandarin), Malay, and Tamil. English is by far the most popular because knowing English provides the most economic opportunity. The literacy rate was 72 percent in 1980, with every student required to learn at least one other language. The relatively low literacy rate, for a highly industrialized nation, is caused by the high drop-out rate in the schools (2:77).

Health has greatly improved since the 1950's because of better sanitation, medical facilities, and public health measures. Life expectancy in 1980 was 65. The government has taken the leading role in improving Singaporean's health (1027).

One unique feature of Singaporean life is the degree to which people live in public housing (see Table V). Upon achieving independence the government started an ambitious program of building public housing. As of 1980, 72 percent of the population lived in public housing. This policy has had two major benefits. It has provided adequate housing

TABLE V  
Public Housing for Selected Years, 1960-1980 (32)

Year	HDB Flats		Percent of Population Living in Public Housing	
	Total Number	Percent Owner-occupied	HDB Flats	Owner-occupied HDB Flats
1960	24,701	-	9.1	-
1970	118,544	26.3	34.6	9.1
1971	126,710	29.4	37.4	11.0
1972	138,027	32.6	41.6	13.6
1973	161,312	36.4	42.7	16.2
1974	185,581	39.7	45.6	18.5
1975	211,079	42.8	50.0	21.4
1976	236,966	46.7	55.0	25.7
1977	274,078	53.0	59.0	31.3
1978	305,540	55.0	64.0	35.2
1979	328,562	58.2	66.0	38.4
1980	346,371	61.8	68.0	42.0

for most of the population by replacing the slums which existed prior to independence and it has stimulated the economy by providing many jobs in the construction industry. The critics of this policy claim that this has destroyed too much of Singapore's traditional community life. In the

1960's many Malays resented moving from their traditional neighborhoods to the public housing. Traditional Chinese also resented the moves because it instituted a more Western lifestyle of emphasizing the nuclear family. One side effect of public housing has been that by breaking up traditional community life, Singaporeans have had more difficulty in forming opposition parties to PAP than they would have had otherwise (2:75).

#### Economic Environment

Salient Features. Singapore is a major trading, industrial, and financial center. It has an open economy that is vulnerable to change in international trends in regard to oil prices and currency valuations. The economy has been characterized by rapid growth with substantial foreign investment and government planning. Foreign investors have been given various financial incentives to invest in Singapore at the behest of the government. The government felt that only by achieving a high standard of living could the fledgling state keep its independence (32:1).

Industry. The leading industrial sectors are petroleum refining, electronics, shipbuilding, electrical machinery, rubber processing, and other light manufactures (see Table VI). Singapore processes much of the oil from Indonesia and then exports it to the rest of the world. Much of Malaysia's rubber is also processed by Singapore.

TABLE VI  
Singapore's Gross Domestic Product by Industry (38)

Industry	1960	1970	1977	1978	1979	1980	1981	1982
	Million Singapore Dollars							
Agriculture and Fishing	74.9	133.3	278.8	269.0	289.8	316.7	338.4	330.5
Quarrying	6.1	19.6	48.1	37.5	41.8	75.6	102.0	134.9
Manufacturing	235.6	1,047.9	3,738.2	4,304.9	5,099.1	5,944.4	7,824.8	7,634.4
Utilities	49.7	148.1	281.2	327.3	398.2	466.9	453.8	487.8
Construction	71.7	386.1	1,177.6	1,089.0	1,218.0	1,407.4	2,010.4	2,813.9
Trade	712.5	1,608.3	4,131.6	4,513.1	4,926.8	5,440.4	5,972.9	6,328.6
Transport and Communication	282.8	595.0	2,020.2	2,374.2	2,492.9	2,735.3	3,604.5	3,875.0
Financial and Business Services	224.5	757.4	2,038.7	2,242.2	2,574.7	3,157.8	5,142.9	6,333.2
Other Services	360.9	734.4	1,638.7	1,793.0	1,984.9	2,262.5	2,582.2	3,236.9

Sources: Singapore Ministry of Trade and Industry, Economic Survey of Singapore 1980 and the Europa Year Book 1984.

Therefore, Singapore's continued economic success is to a large degree dependent on Indonesia and Malaysia not developing their own industrial sector. Since its founding in 1819 Singapore has traditionally been an entrepot. It has been the necessary middleman for India to China trade. But with independence in 1965, the government decided to build up the industrial sector in order to lessen dependence on other countries for Singapore's economic well-being. The government has provided the initiative and resources for the industrialization (32:3).

Foreign Trade. The major exports of Singapore are petroleum products, rubber, machinery, timber, electronics products, and textiles. Major imports are raw materials, machinery and manufactures. Principal trading partners are the United States (15%), Malaysia (13%), and Japan (13%) (27:8). The Singaporean economy has much in common with those of Taiwan, Hong Kong, South Korea, and Japan in its reliance on foreign trade for economic survival. Thus, foreign currency fluctuations can have a large effect on its standard of living. The United States, especially, dramatically affects Singapore's economy. When the dollar is strong on the international market then Singapore's goods are more price competitive in the United States. This is also true of the other countries of Asia. The recent economic conference held in Japan in 1986 had as one of its goals currency

stabilization. This should benefit Singapore's economy because it will make planning production easier.

Transportation. Singapore is one of the transportation and communication hubs of Southeast Asia. Singapore's ports handle approximately 40,000 vessels a year, making it the 4th busiest harbor in the world (4:3). One of the major reasons for this is Singapore's excellent location for world trade. The Malacca Strait is the shortest route between Japan and the Middle East oil trade.

There are two major airports with three smaller ones. The 1,354 miles of road of which 80 percent are paved help Singapore's economy further. The communications network both internally and internationally is good. The excellent communications have made Singapore into one of the region's leading financial centers. The uncertainty over the status of Hong Kong after mainland China replaces British rule in 1997 has also strengthened the financial shift to Singapore (10:6).

Standard of Living. Singapore has one of the highest standards of living in East Asia with per capita income in 1983 of three thousand dollars (see Table VII). This places it only behind Japan in East Asia in standard of living. The economy has been marked by rapid growth with low inflation and low unemployment. The government has managed the economy to a great extent. The labor unions have been kept

TABLE VII  
Actual GOP, GNP, and Population, Singapore, 1959-1983 (39)

Year	GOP at Factor Cost (Current Prices)		GOP at Factor Cost (1980 Prices)		Per Capita GNP at Current Prices		Population	
	Dollars Million	% Yearly Increase	Dollars Million	% Yearly Increase	Dollars	% Yearly Increase	Millions	% Yearly Increase
1959	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.3
1960	2150	N/A	4188	N/A	N/A	N/A	1.63	3.5
1961	2329	8.3	4537	8.3	N/A	N/A	1.69	3.3
1962	2514	7.9	4854	7.0	N/A	N/A	1.75	2.6
1963	2790	11.0	5338	10.0	N/A	N/A	1.80	2.5
1964	2715	-2.7	5152	-3.5	N/A	N/A	1.84	2.5
1965	2956	8.9	5539	7.5	N/A	N/A	1.89	2.5
1966	3331	12.7	7100	28.2	N/A	N/A	1.93	2.3
1967	3746	12.5	6884	-3.0	N/A	N/A	1.98	2.0
1968	4315	15.2	7839	13.9	2190	N/A	2.01	1.6
1969	5020	16.3	8913	13.7	2502	16.0	2.04	1.5
1970	5805	15.6	10136	13.7	2831	14.8	2.07	1.7
1971	6823	17.6	11404	12.5	3229	16.2	2.11	1.7

TABLE VII (continued)

Year	GOP at Factor Cost (Current Prices)		GOP at Factor Cost (1980 Prices)		Per Capita GNP at Current Prices		Population	
	Dollars Million	% Yearly Increase	Dollars Million	% Yearly Increase	Dollars	% Yearly Increase	Millions	% Yearly Increase
1972	8156	19.5	12936	13.4	3784	19.4	2.15	1.8
1973	10205	25.1	14427	11.5	4558	22.7	2.19	1.7
1974	12543	22.9	15343	6.3	5496	22.8	2.23	1.4
1975	13373	6.6	15970	4.1	5907	8.9	2.26	1.3
1976	14575	9.0	17163	7.5	6277	7.7	2.29	1.4
1977	15969	9.6	18519	7.9	6772	9.8	2.33	1.2
1978	17751	11.1	20119	8.6	7535	12.2	2.35	1.2
1979	20452	15.2	22009	9.4	8560	15.0	2.38	1.2
1980	24285	18.7	24285	10.3	9673	14.4	2.41	1.3
1981	28696	18.2	26698	9.9	11352	18.8	2.44	1.2
1982	31946	11.3	28393	6.3	12569	12.1	2.47	1.2
1983	35171	10.1	30647	7.9	13794	11.1	2.50	1.2

Source: IMF, Government Finance Statistics Yearbook, 1984.

peaceful with strikes at a minimum. The labor peace has contributed to a large degree to Singapore's large foreign investment and rapid growth. The high standard of living has been accomplished since independence by changing from a predominantly entrepot economy to an industrial one. The government placed a high priority on achieving a high standard of living in order to win the support of the people for the government and for Singapore to remain independent (10:3).

Reasons for Growth. Singapore's growth has been accomplished because of its neighbors, priorities, the model it chose to follow, its people, and its government. Malaysia and Indonesia have been stable and on friendly terms with Singapore, which has greatly benefitted their economy. The priority of rapid growth while following the best features of the United States, United Kingdom, and Japanese economies has also contributed. In addition, the people have been hard-working while labor unrest has been kept at a minimum through strict government control. The government has developed a constant program of encouraging social discipline and hard work by exploiting a kind of siege mentality. The idea is that Singapore can survive as a nation only through strict social discipline and hard work (39:7).

This continued economic growth has been one of the most important reasons for Singapore's continued existence as a nation. Political stability has been possible because of

the growth. What will happen as people become more affluent and less willing to make the necessary sacrifices for continued growth or if the growth stops, could be the end of the continued dominance of government control, in this case the dominance of the People's Action Party.

### Government and Politics

Form. Singapore has a parliamentary system in which cabinet members are selected from the dominant political group in the legislature. The form is heavily drawn on the British system.

Throughout its history as an independent nation Singapore has been ruled by the People's Action Party (PAP). This has happened because of weak opposition parties and because of strong government action. The strongest opposition was eliminated as a political party in the fight over the merger with the Federation of Malaysia. Prime Minister Lee has been in power ever since 1959.

As mentioned in the section on the economy and social environment the government has had a leading role in Singaporean life. Technocrats have held important positions in the PAP. Power in the country is now held by the technocrats instead of the leading industrialists or other groups. In terms of the United States it would be as if the leading members of the regulatory agencies and universities were also the leading political candidates, instead of being advisors to the politicians.

Legal System. Singapore has a judicial system which has been strongly influenced by the British. The Supreme Court is divided into three chambers: (1) the High Court, (2) the Court of Appeals, and (3) the Court of Criminal Appeal. Subordinate courts include district courts and magistrates' court (10:3)..

Prime Minister Lee. The Singapore government has been dominated by Prime Minister Lee. He has been in power since 1959. His strong leadership has been largely responsible for Singapore's growth, stability, and viability as an independent nation. His role should not be underestimated in trying to understand Singaporean life. His methods have been criticized and a source of concern is what will happen when he steps down from power, which is expected to happen prior to 1991 (7:2).

International Memberships. Singapore is a member of the United Nations, the Commonwealth of Nations, and the Association of South Asian Nations (ASEAN). ASEAN is primarily an economic organization which includes Singapore, Malaysia, Indonesia, Thailand, Brunei, and the Philippines. Cooperation on matters of common defense have thus far been weak. But with the withdrawal of the United States from Vietnam, ASEAN has been more concerned with defense matters. Vietnam is perceived as a threat to the region.

### National Security and the Military

Primary Security. Singapore's security ultimately rests on the superpowers. Therefore Singapore's foreign policy has been one of allowing all of the superpowers access to the area. Balance of power in the region has been one of the primary goals of the Singapore government. But Prime Minister Lee has been one of the most outspoken leaders against Vietnamese domination of Cambodia. As a consequence his policies towards foreign involvement in the region seem to have changed. He has become much more pro-United States (32:19).

Singapore is a member of the five-power defense arrangement with the United Kingdom, Australia, New Zealand, and Malaysia. The arrangement is primarily concerned with air defense of the region. Because of Singapore's small geographical size cooperation with Malaysia is imperative.

Armed Forces. Upon achieving independence in 1965, Singapore's Army had 50 officers and 1,000 enlisted personnel. The Navy and Air Force were for the most part nonexistent. But by 1983 the armed forces had grown to an Army of 42,000 men with 120,000 in reserve, a Navy of 3,000 men for mostly manning patrol craft, and an Air Force of 4,000 men with 100 modern aircraft (31:26).

If a large power wanted to overrun Singapore it would be relatively easy because of Singapore's small size. The

job of the armed forces is to delay the enemy until Singapore's allies can arrive to help (31:59).

The only internal threat to Singapore's security rests with communist insurgency. Singapore has been one of the few nations in the region to publicly criticize Vietnam, which Singapore views as the primary threat to the region (28:5).

Singapore currently spends approximately 5.7 percent of its Gross National Product on defense. It imported 560 million dollars worth of arms for the period 1971 to 1980 expressed in 1979 constant dollars. The recent purchase of 40 ex-US A-4 fighter aircraft with extensive modifications would seem to indicate that Singapore views the external threat as more threatening than an internal insurgency (28:15).

#### United States Assistance

Treaties. Singapore has been a member of SEATO and now ASEAN. The United States has supported these organizations. President Reagan recently visited Indonesia in the spring of 1986 to discuss various matters with ASEAN nations.

United States Aid. United States to Singapore aid in the form of foreign military sales (FMS) credits has not existed since 1969. However, other ASEAN nations have received some FMS aid (31:19).

The primary aid to Singapore has been in the form of arms sales with the United States providing about two-thirds of Singapore's arms. In July of 1985, the United States Congress approved the sale of eight F-16s to Singapore. Significantly the F-16s were not the version usually approved for export but the most effective version made. The planes are expected to be delivered in 1987 or 1988 (36:8). Other aid includes the letting of contracts to Singapore industry for the manufacture of United States weapon parts. They are one of ten countries approved by the United States government for co-production and co-assembly of M-16 rifles, and have begun producing weapon sight devices, communication/electronic equipment, and military vehicle engines on a large scale. Singapore annually exports approximately 20 million dollars worth of weapons (31:19-20).

#### Summary

Singapore is an example of a country that has achieved much despite its short history as an independent nation. As a model of how to achieve economic growth and also positive social changes, Singapore has done well.

### III. Findings

#### Political Conditions for Move to Singapore

Foreign Policy. Traditional foreign policy in South-east Asia amongst ASEAN nations has been one of creating a neutral zone in the area. The goal has been that one super-power should not dominate the region. This attempt at non-alignment with either the Communist bloc or the Western Capitalist bloc was set forth in a declaration by the ASEAN nations in November 1971 (31:9). Pressure from Malaysia was levied against the Philippines for eliminating or reducing the United States bases in the Philippines in 1968. Thailand has been unwilling to accept a large United States military presence in Thailand, since the end of the Vietnam conflict, because of turmoil on its borders with Vietnam and Cambodia (16:7). Thus for the United States naval base to be accepted in Singapore, the policies of non-alignment and the absence of United States bases in the region must not be the primary foreign policies of ASEAN nations.

The United States pullout from Vietnam has had an effect, though, on changing ASEAN nations' foreign policy goals. According to Michael Teo in "Singapore - Consolidation in the Eighties":

Of significance to the region is U.S. affirmation that she will remain a Pacific power. For the Eighties this commitment for the U.S. to the region after Vietnam and the Kampuchean (Cambodia)

invasion is a much sought commitment to the region. A Zone of Peace, Freedom and Neutrality (ZOPFAN), a common calling, especially from the Malaysian leaders, has taken a low profile of late. (32:21)

The increase in the Soviet naval presence in the region has also made ASEAN nations more receptive to a United States presence in the area. The demand for a larger role by the United States has come to a great degree from Prime Minister Lee of Singapore. Singapore desires a United States role in Southeast Asia to balance the Soviet presence in the region which according to Prime Minister Lee is needed

. . . to balance the presence and the strength of the Soviet Union as manifested in their increased Navy and their Air Force, both made formidable by their access to bases in Cam Ranh Bay and Danang. (32:21)

It is significant that Cam Ranh Bay and Danang are both located in Vietnam.

Economy. Besides the increased external threat to the region causing a change in foreign policy towards a United States presence in Southeast Asia, other factors could make a United States base in Singapore more politically possible. One of these is a continued decline in the growth rate of Singapore's economy. As mentioned in the background, Singapore's economy has been marked by significant growth every year since independence. But in 1985 Singapore's economy experienced zero growth and perhaps even

negative growth. Prime Minister Lee expressed his concern over the economy in his National Day Message for 1985:

Every National Day, I reported progress. This year, for the first time, I have to sound an alert. We had minus 1.4% growth in the second quarter. It was provisionally calculated at zero two weeks ago. Now the June data have come in. The outlook is poor. Our economists have revised their forecast to zero growth for the whole of 1985, provided the US economy picks up. Otherwise negative growth is likely. (21)

The downturn has been caused by the contraction in the shipbuilding, oil-refining, and construction sectors of the economy. It is estimated that the shipbuilding industry and the oil-refining industry both have an excess capacity of 50 percent (20:102). Specifically V. G. Kulkarni states that:

The giant petrochemical complex, a Singaporean-Japanese joint venture, has little prospect of turning a profit for the foreseeable future. The oil and petrochemicals sector is the largest single investment in the manufacturing field amounting to some \$3.5 billion (US \$1.5 billion). (20:102)

The Singaporean economy seems to be experiencing many of the same problems that the oil dependent Southwest region of the United States is experiencing.

The construction industry has reached a peak, though, because public housing construction has reached its plateau. In 1983 more than 70 percent of Singapore's residents lived in public housing. The building of public housing has been an effective way of providing employment for tens of

thousands of workers. It has in effect become a jobs program during times of recession (2:75-76).

The decline in Singapore's economy opens the way for the possible building of an American naval base in Singapore. The withdrawal of British military forces from Singapore in 1971, which included the closing of Britain's large naval base, caused the loss of 50,000 jobs and a 20 percent reduction in Singapore's gross national product (2:74). The pressure of a stagnant economy could make an American naval base more politically feasible.

People's Action Party. As mentioned previously Prime Minister Lee has been an advocate of a strong American presence in Southeast Asia. Lee has been in charge of the People's Action Party since 1959 and has been the only prime minister of Singapore since independence. He is expected to retire from active politics by 1990 (34). The successor to Lee must also favor a growing United States presence in Southeast Asia for there to be any real chance of a major United States naval installation in Singapore.

#### Advantages of a Naval Base in Singapore

Locating the 7th Fleet in Singapore, if the Philippines' government forces the United States to withdraw from Subic Bay, has certain advantages. The advantages are:

1. Singapore's strategic location.
2. An educated labor force already in place.

3. The communication network of Singapore.
4. Singapore's infrastructure.
5. The government structure of Singapore.
6. Singapore's ship repair capacity.

Strategic Location. Singapore's location at the tip of the Malayan Peninsula allows United States naval power to be employed in the Indian Ocean. Threats to United States interests in Southeast Asia by nations outside of the region at this time seem remote. Vietnam poses a threat but it will take some time for Vietnam to fully recover from its war against the United States. The increase in Soviet naval forces in Vietnam is more of a threat at this time to the region than Vietnamese forces. The justification for a large United States military presence in the region, then, is the influence American forces can project on areas outside of the region (16:10). Other sites in the central Pacific such as Guam would be even more distant from the Indian Ocean than the Philippines and Singapore.

Educated Labor Force. Singapore as a major ship-builder and port already has a trained labor force in place for ship repair. With the reduction in shipyard demand, trained but currently unemployed workers in the industry are available. In addition, Singapore, as an industrialized nation with a sound education system, can provide repair work and services without a major training effort by the

United States. The Singapore economy has been moving from a labor intensive one in semi-skilled manufactures such as shoes to one based on high technology. Singapore has been attempting to enter to a greater degree the international computer industry (20:102). The manufacture and export of military hardware is already an important part of Singaporean industry.

Communication Center. Singapore already has in place a good telecommunications network. Cable and satellite links, microwave links with Peninsular Malaysia, telex, computer data service with the United States, and a satellite earth station are some of the services available (10:9). The United States Army is already developing better compatibility between United States and Singaporean communications (29:14). The Telecommunications Authority of Singapore (TAS) currently controls and operates the country's domestic and international telecommunications services. Singapore is an important regional telecommunications center and, thus, the TAS is constantly improving its systems. The armed forces of Singapore currently use the standard commercial facilities or portable equipment to satisfy their needs (29:15). Therefore, the United States would not have to invest considerable amounts of money to meet the Navy's needs for a modern communication center.

Infrastructure. As a major trading center and urban area, Singapore has much of the infrastructure needed for a major naval installation already in place. Roads, recreation facilities, and cargo handling piers are already there. These capabilities could be used without any new construction. In comparison with other relocation sites this should save on initial investment costs and time. Other facilities such as schools, hospitals, housing, and office space are also already in place on the island. How many of these facilities would have to be built by the United States to increase Singapore's capacity is hard to determine. The economics are to a large degree dependent on the price Singapore would charge the United States for the use of existing facilities compared to the cost of building new ones. The fact that Britain had a naval base in Singapore from 1938 until 1971 demonstrates that a large naval base can be maintained there.

Subic Bay currently has approximately 1,000 permanently assigned Americans. It is anticipated that at least that many would also be stationed at Singapore. One possible solution to housing the permanently assigned personnel would be the conversion of Singapore's excess hotel capacity to housing. Singapore is currently experiencing a hotel glut. Many major hotels are filled at only 50 percent capacity with some of them offering a free room for a night with the purchase of a meal (14:30).

In addition, Singapore already has a large manufacturing capacity in place. The Jurong Town complex, which was built by the Singaporean government in the 1960's, has more than 1,000 factories (10:114). American businesses are already heavily involved in Singapore's economic life. Part of Singapore's economic program has been to attract foreign businesses to the island. American firms such as Westinghouse and General Electric have invested in Singapore's industrial complexes. The local economy, instead of a long supply line back to the United States, can provide much of the base's needs.

The Government. Singapore has a parliamentary government dominated by PAP. One of the remarkable facts about PAP during its rule of Singapore is that it is for the most part corruption free. According to Thomas Bellows, in the article "Big Fish, Small Pond":

The integrity of those who exercise power in Singapore is ensured by the Corrupt Practices Investigation Bureau. (Its name in Chinese is the Foul Greed Investigation Bureau.) The Bureau is empowered to investigate all charges of corruption in both the public and private sectors. No individual is immune. The Bureau's powers of search and seizure are practically unlimited, and the efficiency and sophistication of its 70 staff members are held in awe by Singaporeans of whatever station. (2:79)

Compared to the reports of corruption in the Marcos regime of the Philippines this comes as a pleasant surprise. Prime

Minister Lee may rule Singapore with an iron hand but from reports he has not done it strictly for personal wealth (2:67).

Singapore's Ship Repair Capacity. One limitation of Subic Bay is that dry dock facilities do not exist for carriers. The dry docks in Subic Bay are not large enough to handle them. Currently carriers in the Pacific are put in dry dock in Japan. Singapore has the dry dock capacity to repair carriers at the Jurong Town shipyard. Presently the shipyard is losing money and the shipyard has reduced its labor force by one-third (20:102). Thus, Singapore gives the United States another potential port for major repairs of carriers.

#### Disadvantages of a Naval Base in Singapore

Assuming that a move to Singapore could be made politically feasible there are several disadvantages to locating a naval base there:

1. Security threat from land attack.
2. Space for air stations.

Security Threat from Land Attack. During World War II Singapore was attacked and captured by the Japanese. The invasion took place from the landward side of the city across the Johore Strait. The Japanese were helped by the fact that much of Singapore's fresh water supply was and still is obtained from the Malaysian Province of Johore.

Right now approximately 50 percent of Singapore's fresh water is obtained from Malaysia (19:19). By cutting off the supply of fresh water the Japanese were able to capture Singapore more easily. The problem of defending itself from a land attack still exists in Singapore with the same weakness of being dependent on its fresh water supply from Malaysia (10:14). Singapore presently captures rainfall to decrease its dependence on Malaysia's water supply. This capability could be increased further in order to further decrease Singapore's dependence on Malaysia. One other possibility is the construction of more plants for the conversion of salt water to fresh water.

The cooperation of Malaysia is vital in defending Singapore. Unlike Europe, an American naval base in Singapore would not be protected, at the time of this writing, by American troops in Malaysia.

Malaysia is predominantly an Islamic nation. Problems between Singapore and Malaysia brought about the split of the two countries in 1965 and relations between the countries are still somewhat uneasy. A Malay is defined by the Malaysian constitution as a person who professes the Muslim religion, habitually speaks Malay, and conforms to Malay customs (9:105). During the 1970's an Islamic revival movement took hold in Malaysia. The movement has continued into the 1980's and many Malay leaders feel that the movement threatens the stability of Malaysia (9:114). In 1986

the moderates of Malaysia won the general elections with the Islamic fundamentalists receiving a small percentage of the vote (3:32). Malaysians seem to favor the present government policy of trying to balance the interests of all ethnic groups in Malaysia. But the threat of extremists gaining control of the government still exists.

Besides an Islamic revival, Malaysia has traditionally had problems with communist insurgencies. The first armed struggle between the Communist Party of Malaysia and the independent government of Malaysia, with British support in the conflict against the communists, started in 1948 and lasted until 1960. Since then the government has had to devote considerable resources to maintaining the suppression of the communist parties of Malaysia. The fact that the communists are for the most part Chinese has not helped interethnic relations in Malaysia. Acts of sabotage, bombings, and terrorism reached a climax in the mid-1970's but are still being committed by the communists in the 1980's (9:247). This poses a dire security threat to the establishment of a naval base in Singapore.

The problem of communist terrorism in Malaysia could be handled in several ways. First, the United States could increase its support to the armed forces of Malaysia. From 1972 to 1982 Malaysia received approximately \$117 million in aid from the United States in the form of Foreign Military Sales Credits (9:258). The aid could be used to further

modernize Malaysian forces. The Malaysian Army in 1984 was essentially a light infantry force with little armor. But more modern equipment such as armored fighting vehicles, armored personnel carriers, tank guided missiles, and anti-aircraft guns have been placed on order (9:268).

Malaysia currently participates in joint exercises with Singapore, Thailand, and Indonesia. Thailand and Malaysia have cooperated in stopping communist insurgency on their common border. Indonesia and Malaysia have cooperated in ending communist holdings on the borders of Sabah and Sarawak. Singapore and Malaysia have participated together on various peacetime maneuvers. Thus, another method of increasing ground security in Malaysia by the United States would be to increase FMS to the other ASEAN nations.

The third method of increasing Malaysia's ground security by the United States could be by stationing United States ground forces in Malaysia or by closer cooperation between the armies of the two countries. But this does not seem a probable scenario in 1986 because of political considerations. Malaysia is generally unwilling to have a major power's armed forces stationed in the country. Plus the United States after Vietnam is hesitant to become involved on the mainland of Asia with United States ground troops.

Space. In addition to the problem of security Singapore has one other major disadvantage as a large naval

installation. The problem is that Singapore is small. Singapore does not have a lot of excess space for the building of a large ammunition depot or the building of another large airfield. Singapore is self-sufficient in pork, chicken, eggs, and grows about half of its vegetables and fruits (2:69). But the food is produced on only 17,920 acres of land out of an approximate total of 147,000 acres. The land then that is not currently built upon is used for agriculture. Subic Bay Naval Station currently consists of 62,000 acres. A facility the size of Subic Bay on Singapore would require approximately 42 percent of the land. Much of the land at Subic Bay is currently used for family housing, recreation facilities such as a golf course and riding stable, or is undeveloped. These functions would by necessity have to be spread throughout the island.

Compounding the problem of space is that the sites of the old British naval bases are now being used for other purposes. Sembawang estate in the north has now been converted into use for the export of rubber and timber from Malaysia. The old British naval base area along the Johore Strait has been used for the Kranji-Sungai Kadut industrial estate. Thus, land once available for a naval complex is now being used for other purposes (10:17).

#### IV. Conclusion

##### Why Singapore?

American plans for maintaining a presence in the Pacific, if the United States bases in the Philippines are closed, include relocating on islands the United States already owns. Guam, which the United States is already using for a base, and the neighboring island of Saipan in the Marianas are often proposed as alternative sites. The biggest advantage given for these island bases is that the United States owns the land and therefore this eases the political problems of building on the islands. Also, the danger of being asked to leave, after completion of the bases, is eliminated.

But while building a base on a sparsely inhabited island in the middle of the Pacific, such as Saipan, has much to recommend it politically, building a base from scratch takes a great deal of time, and initial investment costs are considerable. Expanding the existing base on Guam is also politically expedient, but would require a large investment and time. It is estimated that to replace the buildings, airstrips, and pier facilities at Subic would cost more than 2.6 billion dollars (11:16). The reason Singapore is attractive is that it is a major urban area with the support facilities of a major naval installation already in place. Whether to use Singapore or to expand the

facilities on Guam is analogous to the location of naval installations in the continental United States. Is it better to have a major naval installation in a large metropolitan area such as Philadelphia, New York, or San Francisco, or is it better to have one in smaller, less-developed cities such as Pensacola, Mobile or Galveston?

Another way of examining the problem is whether it is better to rent something or to own it. Singapore would involve renting the facilities necessary to operate a naval installation in the sense that the United States does not own the land of Singapore. The United States would be competing with other users of Singapore's economic resources. The price the United States would have to pay and the amount of resources available would depend on how strong demand is for those resources in other sectors of Singapore's economy. Much of the work to be performed in Singapore could be contracted out to the local economy. But the advantage would be that if the United States should later decide to pull out of Singapore, the United States would not have as many investment costs to recoup from using Singapore as a naval base.

#### Strategic Role of Singapore

Singapore is presently being used for refueling, minor repairs, and as a liberty port. If Subic Bay is closed, the current role of Singapore could still be maintained. The options upon closure of Subic Bay are usually analyzed to

find one replacement for Subic. But another option is for both Guam and Singapore to assume the mission performed by Subic. The existing facilities of Singapore and Singapore's friendliness towards the United States allow a greater role for Singapore in the United States' naval strategy in the Pacific.

Whereas Singapore lacks sufficient space to easily duplicate the existing functions of Subic, Guam lacks the necessary labor force to fulfill Subic's current role. It is estimated that it takes about 26,000 Filipinos to maintain the Subic shipyard. This figure includes the Filipinos in the local economy involved in supporting the shipyard. The entire population of Guam is only 100,000 with the neighboring island of Tinian having 800 people (11:17). Relocating workers to Guam would be expensive even if the necessary number of workers could be found who are willing to relocate to Guam. Foreign workers willing to pay their own way to relocate would still have to go through the United States immigration system. The backlog of Filipinos waiting to emigrate to the United States is already immense.

But the shortage of workers is also an advantage of Guam in that the island is less developed. This would make the storage of Subic's 3.8 million cubic feet of ammunition and 360,000 items stockpiled at the Subic Naval Supply Depot easier to handle.

Thus, the mutually exclusive advantages and disadvantages of Guam and Singapore make it ideal to disperse the workload of Subic to both locations.

#### Recommendations

1. In the short run, Singapore should still be used for ship repair, refueling, and as a liberty port but to a larger degree than it is presently being used. In other words, more ships should use Singapore than at present. It has taken the United States 20 years to build Subic Bay to its current capacity. The initial cost and time involved in enlarging Guam to the capacity of Subic make it imperative that some other site be used while the expansion is performed.

This expanded use of Singapore should begin as soon as possible. Subic Bay may not be closed to the United States in 1991, but it is a definite possibility given the troubled political situation in the Philippines. Continuing to expand Subic, given the risk of closure, makes any eventual closure that more catastrophic. The time, then, to start dispersing Subic's functions is now in order to lessen the immediate effect, upon closure of Subic, on the United States Navy's capability in the Pacific. Subic Bay currently supports the Navy's 7th Fleet with its 90 ships, 550 aircraft, and 70,000 military personnel. Approximately 65 percent of the 7th Fleet's repair work is performed at Subic (11:17). Dispersing some of Subic's repair work

to Singapore, now, would strengthen Singapore's ailing shipyard industry. This policy would cost more than using Subic because the wages of Singaporean workers are higher than those of Filipino workers in comparable jobs. Dispersing Subic's storage of ammunition and supplies to Singapore is not feasible, as mentioned before, because of the space limitations in Singapore. Refueling more ships at Singapore, right now, would not require the investment of United States funds into additional port facilities in Singapore while lessening our dependence on Subic. Waiting until Subic actually closes would complicate the task of finding alternative sites because of the United States' weaker bargaining position.

3. Because of the political conditions in Southeast Asia Singapore should not be built into another Subic Bay. The people of the region are sensitive to the vestiges of colonialism such as a foreign military installation in their country. The goal of a zone of peace in the region is still a much sought after foreign policy goal by the countries in the region. But the facilities of Singapore should still be used by United States forces. The Singaporean government desires a United States presence in the region but without making Singapore into an American naval base. The building of permanent facilities such as an airfield, ammunition depot, and supply center should not be undertaken in Singapore. But the increased use of existing Singapore resources

would be tolerated by the Singapore government and would be beneficial to United States interests in the Pacific. Thus, the number of ships using Singapore as a port for refueling, ship repairs, and as a liberty port should be increased.

### Bibliography

1. Bedlington, Stanley S. Malaysia and Singapore. London, Great Britain: Cornell University Press, 1978.
2. Bellows, Thomas. "Big Fish, Small Pond," Winston Quarterly, 32: 66-82 (Winter 1983).
3. Berthelson, John. "Malaysian Premier Firms Power Base with Coalition's Landslide Election Win," Wall Street Journal, 67: 32 (5 Aug 1986).
4. Boyd, R. G. The Strategic Significance of the Malacca Strait. Report. Ottawa, Canada: Operational Research and Analysis Establishment, Apr 77.
5. Branigan, William. "Soviet Presence in Far East: Nothing's Pacific About It," Dayton Daily News, 109: 8-B (3 Aug 1986).
6. Broinowski, Alison. Understanding ASEAN. New York NY: St. Martin's Press, 1982.
7. Chee, Chan Heng. "Singapore: Political Transition and Political Institutionalization," Proceedings of the Conference on Singapore and the U.S. into the 1990's. Tufts University Press, Medford MA, 1984.
8. Conilogue, Cheri L. New Bases for Old: An Unusual View of the Philippine Bases Problem. MS thesis, Naval Postgraduate School, Monterey CA, 1984.
9. Department of the Army. Malaysia: A Country Study (Fourth Edition). DA Pam 550-45. Washington: HQ USA, 1985.
10. -----. Singapore: A Country Study. DA Pam 550-45. Washington: HQ USA, 1976.
11. Denny, Jeffrey. "How Important are Subic and Clark?" Military Logistics Forum, 15-18 (Nov/Dec 1985).
12. Dohanabalan, S., Minister for Singapore Foreign Affairs. Address to 18th ASEAN Ministerial Meeting. Kuala Lumpur, Malaysia, 8 July 1985.
13. Enerio, Billy U. A Study of the U.S. Security Assistance Program to the Armed Forces of the Philippines. MS thesis, LSSR 83-83. School of Logistics, Air Force

Institute of Technology (AU), Wright-Patterson AFB OH,  
September 1983.

14. "Fierce Competition," Wall Street Journal, 207: 30  
(6 May 1986).
15. "Filipino Panel Votes to Prohibit Bases," Dayton Daily News, 109: 2 (19 July 1986).
16. Grinter, Lawrence E. The Philippine Bases: Continuing Utility in a Changing Strategic Context, National Security Affairs Monograph Series 80-2, February 1980.
17. Hall, D. G. E. A History of South-East Asia (Third Edition). New York NY: St. Martin's Press, 1968.
18. Krieger, Col Clifford R. and Capt Robert E. Webb. The Strategic Importance of US Military Facilities in the Republic of the Philippines. Group study project. US Army War College, Carlisle Barracks PA, 1983.
19. Kulkarni, V. K. "An Ever-growing Thirst," Far Eastern Economic Review, 130: 19-20 (3 Oct 1985).
20. -----. "Singapore's Ills Are Mostly Its Own Work," Far Eastern Economics Review, 129: 102-103 (22 Aug 1985).
21. Lee, Kuan-Yew, Prime Minister of Singapore. Address to Parliament. Singapore, 8 August 1985.
22. Meow, Seah Chee. Trends in Singapore. Singapore: Singapore University Press, 1975.
23. Millar, T. B. International Security in the Southeast Asian and Southwest Pacific Region. St. Lucia, Queensland: University of Queensland Press, 1983.
24. Osborne, Milton. Southeast Asia: An Introductory History. Sydney, Australia: George Allen & Unwin, 1979.
25. Pauker, Guy J. ASEAN Perspectives on International Developments in Southeast Asia, Rand Paper, January 1983.
26. -----. "ASEAN Trends and Problems in the 1980's," Proceedings of the Conference on Political, Economic, and Security Trends and Problems in East Asia. Cascades Conference Center, Williamsburg VA, Jan 5-9 1981.

27. Pauker, Guy J. "ASEAN: What It Is, What It Is Not, What It Can Be," Statement prepared for the hearing on U.S. policy in Southeast Asia, held on July 22, 1981, by the Subcommittee on East Asia and Pacific Affairs of the U.S. Senate Committee on Foreign Relations.
28. -----. "Security and Economics: The Military Expenditures of the ASEAN Countries," Proceedings of the Second U.S.-ASEAN Conference on Economic Development and Political Stability: Alternative Scenarios for the 1980s. Berkeley CA, May 2-4 1983.
29. Ruhland, Michael E., A. E. Beachey, and Brajesh C. Mishra. "Pacom Army C-E Interoperability Assessment 82 (Pacia 82) for: Republic of Singapore: Final Report, Sept 1981-Sept 82." Contract DAEAl8-81-G-0069. BDM Corporation, McLean VA, Sept 82.
30. "Singapore Approves Authority to Restrict Foreign Publications," Wall Street Journal, 67: 33 (5 Aug 1986).
31. Stubblefield, Gary R. Maximizing Negotiations Over United States National Interests with the Association of Southeast Asian Nations. MS thesis, Naval Post-graduate School, Monterey CA, December 1980.
32. Teo, Micheal E. C. "Singapore-Consolidation in the Eighties." Unpublished report no. 0674758/B. Air War College, Maxwell AFB AL, 1983.
33. Toland, John. The Rising Sun. New York NY: Random House, 1970.
34. Tong, Goh Chok. Address to Conference on Singapore and U.S. into the 1990's. Tufts University, Fletcher School of Law and Diplomacy, Medford MA, 6 Nov 1985.
35. -----. Address to Havard Club of Malaysia. Kuala Lumpur, Malaysia, 21 Aug 1985.
36. "U.S. Allows Singapore to Buy Upgraded Version of F-16 Jet," New York Times, 134: 8 (9 July 1985).
37. Weatherbee, Donald E. and others. The Political Impact of Islam in Southeast Asia, Contract No. 1722-420155. Institute of Internal Studies, University of South Carolina, Columbia SC, September 1985.
38. Williams, Lea E. Southeast Asia: A History. New York NY: Oxford University Press, 1976.

39. Yong, Gary Y. P. Singapore Economic Achievement: A Model for Rapid Growth. Unpublished report no. 1039619J. Air War College, Maxwell AFB AL, March 1985.
40. Young, P. Lewis. "The Navies of the ASEAN Nations," Jane's Defense Weekly, 4: 67-75 (21 July 1984).

VITA

Lieutenant Larry L. Peterson was born on 3 June 1954 in Des Moines, Iowa. He graduated from High school in Mountain Home, Idaho, in 1972 and attended the University of Idaho from which he received the degree of Bachelor of Science in Economics in May 1978. He received a commission in the USN through the OCS program in 1980. He completed supply corps training in 1981. He then served as an assistant supply officer on board the USS Vancouver until July 1983. He then served with the Naval Audit Service, Pacific until entering the School of Logistics, Air Force Institute of Technology, in June 1985.

Permanent address: 580 E. 12th N.

Mountain Home, Idaho 83647

## UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

## REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS <i>A174501</i>										
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited.										
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE												
4. PERFORMING ORGANIZATION REPORT NUMBER(S) AFIT/GLM/LSH/86S-57		5. MONITORING ORGANIZATION REPORT NUMBER(S)										
6a. NAME OF PERFORMING ORGANIZATION School of Systems and Logistics	6b. OFFICE SYMBOL (If applicable) AFIT/LS	7a. NAME OF MONITORING ORGANIZATION										
6c. ADDRESS (City, State and ZIP Code) Air Force Institute of Technology Wright-Patterson AFB, Ohio 45433-6583		7b. ADDRESS (City, State and ZIP Code)										
8a. NAME OF FUNDING SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER										
8c. ADDRESS (City, State and ZIP Code)		10. SOURCE OF FUNDING NOS.  PROGRAM ELEMENT NO.      PROJECT NO.      TASK NO.      WORK UNIT NO										
11. TITLE (Include Security Classification) See Box 19												
12. PERSONAL AUTHOR(S) Larry L. Peterson, B.S., Lieutenant, USNR												
13a. TYPE OF REPORT MS Thesis	13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Yr., Mo., Day) 1986 September	15. PAGE COUNT 78									
16. SUPPLEMENTARY NOTATION												
17. COSATI CODES <table border="1"><tr><th>FIELD</th><th>GROUP</th><th>SUB. GR.</th></tr><tr><td>13</td><td>10</td><td></td></tr><tr><td></td><td></td><td></td></tr></table>		FIELD	GROUP	SUB. GR.	13	10					18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) Philippines, Singapore, Naval Shore Installation, Southeast Asia	
FIELD	GROUP	SUB. GR.										
13	10											
19. ABSTRACT (Continue on reverse if necessary and identify by block number)												
Title: SINGAPORE AS AN ALTERNATIVE TO SUBIC BAY NAVAL STATION												
Thesis Chairman: Robert B. Weaver Associate Professor of Communication												
Approved for public release: IAW AFPR 100-5 <i>John E. WOLAYER 29 Sept 86</i> John E. Wolayer Human Factors and Professional Development Air Force Institute of Technology (AFIT) Wright-Patterson AFB OH 45433												
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS <input type="checkbox"/>		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED										
22a. NAME OF RESPONSIBLE INDIVIDUAL Robert B. Weaver		22b. TELEPHONE NUMBER (Include Area Code) 513-255-2254	22c. OFFICE SYMBOL AFIT/LS									

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

This investigation examined the feasibility of the Republic of Singapore as an alternative location for the current United States naval installation in Subic Bay, Philippines. Singapore was examined with respect to United States strategy goals in Southeast Asia, the political situation in the region, and the capabilities of Singapore as a United States naval base. The results present the political conditions necessary for a United States base to be accepted in Singapore, the advantages of relocating to Singapore, and the disadvantages of locating in Singapore. The recommendation of this research is that the number of 7th Fleet ships using Singapore as a port for the performance of minor shipboard repairs and ship refueling and as a liberty port should be increased. It is not considered feasible for Singapore to completely replace Subic Bay as a United States naval base.

END

/-87

DTIC